

CLAIMS

1. An electrolysis cell comprising a pair of electrolysis rooms located opposite to each other via an ion permeable membrane, raw water supply units for supplying the rooms with raw water, a pair of electrodes disposed in the respective electrolysis rooms with the membrane interposed therebetween, and electrolyzed water discharge units for taking out electrolyzed water, which has been obtained by applying a voltage to the electrodes to electrolyze the raw water fed to the respective rooms by the raw water supply units, from the electrolysis rooms, wherein:

the membrane is an anion exchange membrane, the electrodes adhere firmly to both surfaces of the anion exchange membrane to form a membrane-electrode structure through which anions can permeate, and at least the raw water fed to the electrolysis room on the cathode side contains a chloride as an electrolyte.

2. An electrolysis cell according to Claim 1, wherein the raw water fed to the both electrolysis rooms contains the electrolyte.

3. An electrolysis cell according to Claim 1, wherein only the raw water fed to the electrolysis room on the cathode side contains the electrolyte.

25 4. An electrolysis cell according to Claim 1, wherein the electrodes are each a porous material made of conductive powders.

5. An electrolysis cell according to Claim 4,
wherein the electrodes are formed by applying a conductive
paste containing conductive powders onto the surface of
the anion exchange membrane, followed by heating or
5 pressurization.

6. An electrolysis cell according to Claim 4,
wherein the electrodes each contains an electrode base
material made of a powdery titanium compound, a catalyst
dispersed in the electrode base material and a binder for
10 binding the electrode base material with the catalyst and
is a porous material formed integrally with the membrane.

7. An electrolysis cell according to Claim 6,
wherein the titanium compound is titanium carbide or
titanium nitride.

15 8. An electrolysis cell according to Claim 6,
wherein the catalyst is platinum black or iridium black.

9. An electrolysis cell according to Claim 1,
wherein the electrodes are mesh-shaped or comb-shaped.

10. An electrolysis cell according to Claim 9,
20 wherein the electrodes are each prepared by applying a
conductive paste containing conductive powders onto the
surface of the anion exchange membrane, followed by
heating or pressurization.

11. An electrolyzed water producing equipment
25 using an electrolysis cell comprising a pair of
electrolysis rooms located opposite to each other via an
ion permeable membrane, raw water supply units for

supplying the rooms with raw water, a pair of electrodes disposed in the respective electrolysis rooms with the membrane interposed therebetween, and electrolyzed water discharge units for taking out the electrolyzed water,

5 which has been obtained by applying a voltage to the electrodes to electrolyze the raw water fed to the respective rooms by the raw water supply units, from the electrolysis rooms, wherein the membrane is an anion exchange membrane, the electrodes adhere firmly to both

10 surfaces of the anion exchange membrane to form a membrane-electrode structure through which anions can permeate, and at least the raw water fed to the electrolysis room on the cathode side contains a chloride as an electrolyte.